ILLINOIS AGRICULTURAL ECONOMICS STAFF PAPER

THE UTILIZATION OF LOCATION SPECIFIC

CAPITAL IN MIGRATION DECISION-MAKING

by

James D. Williams
Department of Agricultural
Economics

David Byron McMil
Department of Sociol

THE UTILIZATION OF LOCATION SPECIFIC

CAPITAL IN MIGRATION DECISION-MAKING

by

James D. Williams   David Byron McMillen
Department of Agricultural   Department of Sociology
       Economics

University of Illinois
Urbana-Champaign

Introduction

The population turnaround phenomenon has brought an increasing awareness of the potentially important role of nontraditional, and particularly nonemployment-related, factors in the decision-making processes of the involved migrants. Some of these nonemployment-related factors, such as familial and friendship ties, are not new to migration researchers but have instead been recognized as somehow important in previous research on migration. The purpose of this research is to employ a unique data resource to begin to untangle the complex role of ties in producing directed destination selection. The role of ties in the decision to move, while an important research concern, will remain unanalyzed here.

Two elements of our dataset contribute especially importantly to our ability to add to the literature on influences upon migration. First, our sample comprises over 700 post-1970 inmigrants to rapidly growing nonmetropolitan areas of the Midwest. Previous research has demonstrated that these migrants, especially those from metropolitan origins, have tended to have moved in unusual proportions for nonemployment related reasons (Williams and Sofranko, 1979). Moreover, when reasons for destination selection are operationally separated from reasons for leaving the origin location, the second important unique element of this dataset, we find that these migrants have to a considerable degree selected destinations because of pre-existing ties. Regardless of whether or not these migrants are unusual in their proportions moving and selecting destinations for nontraditional reasons, their absolute numbers in this dataset allow detailed forms of analysis not previously attempted.

The following analysis is, however, limited. We will focus especially on the relative importance of prior residence, and familial and friendship ties in the process of destination selection. Our findings will help to provide meaning to the rather amorphous quality of having lived in an area before in the process of return migration and will clarify the importance of family and friends in primary and onward migration.

Background

From the outset it is important to recognize that traditional terminology in discussing causes of migration have tended to become unrealistically polarized. We refer here to the distinction between "economic" and "social"

causes of migration. Generally, economic causes relate to employment and income factors while social causes emphasize the kinship and friendship factors. Two recent reviews of migration literature serve to perpetuate this terminological tradition (Ritchey, 1976; Shaw, 1975), and another recent article has very explicitly attempted to compare economic and social factors in the destination selection process (Toney, 1978).

In this research, we wish to move away from the two simplistic equation of: (1) economic reasons equal job and income responses, and (2) social reasons equal familial or kinship ties. These equations are neither mutuall exclusive nor exhaustive. In contrast, we wish to concern ourselves with the more general role of ties in shaping the destination selection process. Further, such ties can exist in many forms, both social and economic. Family and friends, one form of tie to a potential destination, may serve both social and economic functions in the migration decision-making process. For example, friends or family at a destination may serve as an economic influence on decision-making by providing labor or financial assistance. As an information or integrative source, the kinship or friendship factor may seem more social. Furthermore, other forms of ties to potential destinations may be more explicitly economic. Property, acquired through inheritance, prior residential experience, or however, may contribute to the attractiveness of a potential destination and thus increase the probability of moving to a given area if moving is considered. Similarly, the long distance commuter may choose to move closer to the work site. In this case, the migrant is not trying to get a better job, but simply trying to capitalize on a tie to a place.

From the predictive point of view, it would seem that knowing a person's attachments to other locations than the current residence should provide some degree of information about where that person might go if a move is considered. In other words, if we separate the issue of whether or not to move from the issue of where to move, then the direction of migration may be a function of ties and their differing determining strength when existing in different forms. This is consistent with recent behavioral approaches to migration decision-making which emphasize that different factors cause different parts of the migration decision-making process (see for discussions, Brown and Moore, 1970; Wolpert, 1965;

Speare, et al., 1974; and Roseman, 1977).

Understanding destination selection, then, is perhaps more a function of knowing whether or not a migrant will seek out the best job at the highest salary, regardless of attachments to other locations, or instead will be inclined to use attachments in selecting a destination. While the possible permutations on using ties to other places in combination with migration motivations could become quite complex, it does seem realistic to consider ties, generally, in contrast to other reasons for destination selection and more fruitfully than a simple "economic" versus "social" reasons dichotomy with all its implications.

Our approach fits nicely with some recent research, and terminology presented by DaVanzo and Morrison (1978). In an effort to express our interest in the role of ties as a generalized influence on migration decison-making, we draw upon DaVanzo and Morrison's concept of location specific capital as a "generic term denoting any or all of the diverse factors that 'tie' a person to a particular place" (1978:8). Location specific capital at alternative locations may be acquired in many ways but DaVanzo and Morrison concentrate on what is probably the most important source of ties—past migration history. Their data support the hypothesis that "when a person who has migrated moves again, he or she should favor some former place of residence as the destination because the person has location specific capital there" (1978:8).

Ties, or location specific capital need not be acquired through prior residence and these may be important in all types of migration, not just return. And, there is some cause for concern over just what it is about having lived in an area before that may draw a person back. Is the causal element that of family or friends left behind, or is there truly some subjective sense in which people simply desire to "move home" to a familiar residential environment? Furthermore, are family and friends, as one form of location specific capital, equally viable in determining onward or primary migration as we presume them to be in influencing return migration?

In the following analysis we will answer these questions by looking specifically at the causal meaning of family and friends, and prior residence in producing directed destination selection. In a general form, we will investigate the extent to which the existence of two selected forms of location specific capital have resulted in destination selection

Data

In the course of investigating the importance of ties to migration decision making, we will employ an analysis of data from a recent midwestern study of inmigrants to rapidly growing nonmetropolitan counties. This study, conducted with the assistance of the Survey Research Laboratory of the University of Illinois, is more fully described in Williams and Sofranko (1979). In the next few paragraphs, we briefly describe relevant aspects of the study design.

As of November, 1975, there were 866 nonmetropolitan counties in the 12 state North Central Region. On the basis of estimates published yearly by the Bureau of the Census, we identified and selected all 75 nonmetropolitan counties which had greater than 10 percent (1970 base population) net migration between 1970 and 1975. This target group contained no counties in Iowa or Kansas, while Missouri and Michigan accounted for 24 and 21 counties, respectively. Forty-eight of the counties contained no urban place in 1970, and 25 of the counties were adjacent to an SMSA in 1975.

Within these high net inmigration counties a survey population of 316,430 households with telephones was estimated from 1975 census estimates of households and 1970 estimates of telephone coverage for the target counties. For each county, all telephone exchange areas were identified and the most recent directories (1976 or 1977) were obtained. From these directories a systematic sample of 11,329 households was drawn using a sampling interval of 1/28 excluding, as much as possible, double and business listings.

In order to maximize the probability of obtaining an inmigrant on any given call, the sample names, addresses, and phone numbers were matched with the appropriate 1970 telephone directory. This matching, performed at the Library of Congress, yielded two strata: (1) expected resident (matched) households, and (2) expected inmigrant (unmatched) households. Problems arising with common surnames, intra-county migrants, and redistricting of telephone exchange areas were handled by treating all ambiguous cases as unmatched and placing them in the expected migrant stratum.

Within the survey population of households, three respondent types were identified, and quotas established, for subsequent disproportionately stratified sampling: (1) continuous residents of the counties since April, 1970; (2) inmigrants since April 1970 who had moved from an SMSA county;

(3) and inmigrants since April 1970 who had moved from a nonSMSA county.
Resident status and migrant type were determined from a series of initial
screening questions. Migrant status requires crossing a county boundary.
The various selection rules and probabilities of selection yielded interview
with 500 metropolitan origin migrants and 210 interviews with nonmetropolita
origin migrants. The resident sample is not used in this analysis.

Heads of households were the primary respondents, though spouses were
interviewed after several unsuccessful attempts at contacting the head. We
are thus studying household rather than individual migration. Only persons
reporting the current location as their usual place of residence were inter-
viewed and thus seasonal residents were excluded.

In the subsequent analysis, the two migrant substrata (metropolitan and
nonmetropolitan origin) have been combined. As the numbers of completed
interviews are the result of complex sampling and not simple random sampling
the two migrant substrata have been weighted to reflect estimated proportion
representation in the population. Because this adjustment is minor, (5:2 to
4:3) no manipulations have been performed on sample variances and we assume
simple random sampling.

In the current study, respondents were asked a question designed to
elicit criteria for destination selection. Reasons for destination selectio
are based upon a question asking the respondent why s/he picked "this" place
instead of some other. We collected and report data for only one reason for
destination selection.

The open-ended responses to the reason question were later coded into
an initial 62 category scheme allowing for considerable specificity of res-
ponses. In order to assure reliable results, the coding of the reason ques-
tion was performed independently three times. Where inter-coder discrepan-
cies occurred, differences were arbitrated and necessary changes made. The
methodologies used in the analyses in this paper will be explained in the
context of substantive issues.

Demonstration

Table 1 presents the detailed categorization scheme, raw data and per-
centages, for respondents' reasons for choosing their destinations. Ob-
viously, location specific capital has figured importantly in their decision
about where to move with nearly half citing tie reasons (47.6 percent). We
suspect that this may be at least partly a function of the somewhat peculiar

motivations of migrants being attracted to these high growth nonmetropolitan areas. In an earlier paper it has been noted that these migrants' bases for leaving their origins seem unusually a function of environmental influences, and retirement (Williams and Sofranko, 1979). In another paper, it has been shown that those who were initially motivated for environmental and retirement reasons tended, disproportionately, to cite location specific capital bases for destination selection (Williams and McMillen, 1978). Thus, the nonmetropolitan midwest seems to be capturing disproportionate numbers of persons for whom destination selection is a function of location specific capital. We can only speculate that this may be characteristic of "amenity" migration in general.

The data in Table 1 further document that location specific capital has been utilized by these migrants in a variety of forms. Most of those reporting ties reasons suggest a desire to be closer to family or friends, or at least stated that "this" place was more favorable because of family or friends (about 29 percent). The second most frequently cited tie response was a suggestion that the respondent chose "this" place because of prior residence (24 percent). Finally, we would note that the third most frequently cited tie response indicated that the respondent had property in the area (about 21 percent). In total these three tie responses account for about 35 percent of the migrants' destination selections.

Overall, we may notice that, as suggested by these responses, a migrant need not have ever migrated before, or lived in the area before, in order to have acquired location specific capital in the destination area. Family and friends, for instance, may have migrated to the area at some earlier time and served as the link to a potential migrant. Vacation contact also need not entail prior migrant status or prior long term residence. The importance of vacation contact, especially among retirees, in shaping the process of search space formation has been documented by Sly in a study of Florida inmigrants (1974).

These comments simply reinforce our contention that DaVanzo and Morrison's concept of location specific capital is relevant to the decision making process of a great variety of types of migrants; those moving for the first time, those who have moved before and do not return to a prior residence in a subsequent move, as well as return migrants.

Tie-related responses to the reason question suggest that the respondent has drawn upon some form of location specific capital in the migration decision making process. Let us first define the utilization of location specific capital as the proportion suggesting ties as the basis for destination selection. We would anticipate that the utilization of location specific capital presumes the existence of location specific capital in some form. But, location specific capital need not be cashed in in the sense of being the reason for selecting the destination area. There may be numerous migrants with friends and relatives in the area, or with prior residence, who selected their destination on the basis of employment or other non-tie-related reasons. Thus, existence of location specific capital is a necessary but not sufficient condition for use. If we can objectively measure the existence of location specific capital, then we can investigate the relationship between having and drawing upon location specific capital.

In line with Da Vanzo and Morrison's work, we have chosen to investigate prior residence as one form of location specific capital. Prior residence is indicated by responses to a question asking if the respondent had ever lived in "this area" prior to moving "here" most recently. Notice that this form of the question allows the respondent to subjectively define "this area" in the same sense in which s/he may be moving "back home." About 30 percent of the households report having prior residence in the area and we may define them as having one unit of location specific capital.

The meaning of prior residence, in terms of its connection to the use of location specific capital, is not entirely clear. From the detailed responses to the destination selection question we find some suggesting a desire to move "back home" which would seem closely allied to the concept of prior residence as the causal variable. However, those with prior residence may also have family or friends, or property and suggest such reasons for destination selection. In short, the utilization of location specific capital in the form of prior residence could arise in a variety of different responses to the destination selection question.

For reasons purely of expedience, we have chosen to limit our investigation of forms of utilization to the three most frequently cited reasons for choosing the destination: (1) family or friends in the area; (2) desire to move back home; and (3) property. It will be remembered that together these three responses account for more than 70 percent of location specific capital

The relationship between using and having location specific capital is best defined by a slope line which in the special case of two "dummy" variables used here, is simply the difference in the percentages (proportions) reporting the three considered tie responses between those with and without prior residential experience in the area. Among those without prior residence we find about 25 percent choosing their destinations on the basis of one of the three allowed types of location specific capital responses, and among those with prior residence the level of utilization is about 54 percent. The slope, or difference, is thus 29 percentage points.

This slope may be interpreted in a variety of meaningful ways. It is a rate of return per person or hundred, on one unit of location specific capital (LSC) in the form of prior residence where returns involve either a desire to move back home, a desire to join family and friends, or owning property in the area. We could also think of this difference in percentage as a "cash-in" rate for prior residence or, alternatively, as the salience of prior residence to destination selection on the basis of LSC in the three allowed forms.

The linkage between prior residence and utilization of LSC, however, is not purely specified as suggested earlier. Prior residence may simply be highly correlated with some other factor which is truly causal in destination selection. The utilization responses suggest family or friends as one such factor. Coming back home may be a function of having prior residence or family and friends, while the existence of family or friends would predict the response of a desire to be nearer to family or friends. But to be certain of the connections we must specify the second form of LSC.

Included in the questionnaire items were questions asking respondents if prior to moving to the area, they had (1) relatives, or (2) close friends in the area to which they moved. From these we have created a dichotomous variable for the existence of either family or friends versus neither.

We now have separate indicators of the existence of LSC in two forms: (1) prior residence; and (2) family or friends. Ultimately we intend to demonstrate how the existence of LSC in these two forms affects the utilization levels of LSC in each of the three possible forms. Variable effects will be defined in terms of rates of return to one unit of existing location specific capital per person.

In order to obtain coefficients for effects which are directly inter-
pretable (unstandardized and in proportional units) as rates of return in
a system which maintains the capability to include interaction effects, we
draw upon techniques of linear flow graph, or d-system analysis as expli-
cated by Davis (1975; 1976). The technique is highly similar to those of
dummy variable regression (not correlation) and log-linear contingency
analysis. Flow graph analysis may be illustrated using our data, first,
in a simple example.

We have suggested that the use of LSC is some function of the existence
of LSC, or, alternatively that existence is the necessary but not sufficient
condition for utilization. Let us first examine the relationship between
having either prior residence, or family or friends, and use of location
specific capital in any of the three ways noted earlier. This is simply a
two by two table of use/nonuse by having or not having the indicated forms
of location specific capital. The data are provided below:

	Proportions using LSC	Base N
No family or friends, no prior residence	.1492	221
Either or both	.4390	492
Total	.3492	713
No family or friends or prior residence	.3100	713

Figure 1 presents these data in linear flow graph form. In this case
the results are identical to those which would be obtained from a linear
regression of use on existence of LSC as follows:

$$\bar{Y} = a + b\bar{X} \text{ , or}$$
$$.3492 = .1492 + .2898 \ (.6900).$$

The rate of return to LSC in the tested form is about 29 percentage points
and in flow graph terminology is known as the transmittance. The constant
(.1492) indicates the base level of utilization to which is compared the
increase attributable to having LSC in the defined form (.2898). Substan-
tively, the diagram shows that there is a sizable differential in levels of
utilization between those with and without location specific capital. We
should also note that utilization is not zero among those we have defined
as having zero location specific capital. To a considerable extent these
respondents are giving property as the basis for inmigration, but there are

a few "inconsistent" cases. Regardless, we are most interested in differentials in proportions and not the absolute levels of utilization.

Since the utilization of LSC is indeed related to the existence of LSC, we may further suggest that utilization should be related to the amount of LSC a respondent possessed prior to inmigration. That is, we should anticipate the highest rate of utilization among those with both family or friends and prior residence and an intermediate level of utilization among those with only one form of location specific capital. This may be investigated by performing a flow graph decomposition of transmittances within a two by three table of use/nonuse by level of LSC (none, one only, both). The results are diagrammed in Figure 2.

As before, the referent category is that of not having any of the valid forms of location specific capital. As before, utilization is about 15 percent. Among those with either family or friends, or prior residence, the level of utilization rises about 19 percentage points or to a value of about 34 percent responding that the destination was selected on the basis of allowed items. For those with both forms of LSC, the level of utilization rises by about 41 percentage points over those without LSC to a level of close to 66 percent suggesting destination selection on the basis of tie responses included in this analysis. We may further note that the additional effect of one form (.19), if doubled, is very nearly the observed addit:al effect of both forms (.41) and we may conclude that there is an absence of curvilinearity in this table. An additional unit of LSC is monotonically equal to about a 20 percentage point increase in the level of utilization of location specific capital. It will be remembered that an interaction effect is suggested when the sum of the effects for each of the component forms of LSC is much less (or greater) than the effect of both.

That we observe such linearity in no way suggests that prior residence and family and friends have equal effects on the utilization of location specific capital or that there would be no interaction in more detailed analysis. It does, however, suggest that taking utilization, overall, as a function of existence of the two forms is not the result of an interaction between existence in the two forms. That is, however the separate effects (transmittances) of the two forms of LSC are manifested, it will be the case that the sum of their effects will approximately equal the transmittance for

having both. In order to demonstrate this fact, and investigate the
independent effects of the two forms of existence of LSC we have proceeded
with a disaggregation corresponding to a fully saturated model. Using the
general approach suggested by Davis (1976:132) we have solved the system in
a block-recursive format by creating a polytomy describing mutually exclu-
sively all possibilities for the two existence variables. We thus have
categories: (1) having neither; (2) having only prior residence; (3) having
family or friends only; and (4) having both. Again using "nothing" as the
referent category we may solve for the rates of return in straightforward
fashion. The results are provided in Figure 3.

As has been the case previously, our baseline level of utilization is
about 15 percent for those without any of the forms of location specific
capital being investigated here. Moreover, and not surprisingly, we find
that prior residence and family or friends do not share equally in the
transmittances of a total effect of having only one form of location speci-
fic capital. The transmittance value (d coefficient) for the condition of
having only prior residence is about 8 percentage points, while that for
family or friends is considerably higher than that for prior residence.
However, we may note that even if prior residence had a larger transmittance,
its total impact on the mean level of utilization would be quite minor as
only about 2 percent (1.82%) of the sample has prior residence without having
family or friends. From data not displayed, we find that the relationship
between the existence of prior residence and the existence of family or
friends is quite asymmetric. A person with prior residence is virtually
certain to have family or friends while a person with family or friends
need not have acquired them from living in the area before.

These findings provide us with an interesting interpretation of our
data. Those with only family or friends in the area prior to inmigrating,
and who are tending to utilize LSC in destination selection would seem to
be responding to the draw of social ties without those ties requiring that
they lived in the area before. Thus, we have a measure of the effect of
familial and friendship ties at a "new" location upon destination selection.
For those with both types of LSC, we are measuring the effect of social ties
remaining at an "old" residence since these people have family and friends

and prior residence. From the results it seems that both types exert considerable draw upon these migrants but that family or friends at an "old" location exert stronger influence than those at a new location.

The model presented in Figure 3 applies only to the utilization of location specific capital in only one of the three allowed ways. That is, the levels being disaggregated across independent variables are combined across three different responses suggesting the utilization of location specific capital. However, the models for each of these additive elements of the total proportion using LSC may differ considerably. It has, for instance, already been suggested that prior residence should form its strongest linkage or have its highest rate of return to utilization in the form of a desire to move back home. Property may also have been acquired through prior residential connections. We would expect the rate of return to family and friends to be highest when considering utilization in the form of responses that the destination was selected on the basis of family or friends. Furthermore, the currently combined models may evidence entirely different forms when disaggregated into component elements. As one example, the model for "back home" responses could evidence interaction while none are observed for other utilization forms.

In an effort to provide further specificity as to how location specific capital is transformed into destination selection behavior we have completely broken down the utilization variable into its three additive components and modeled each separately. Thus, we have one equation for responses suggesting a desire to move back home (versus everything else), one for destination selection on the basis of family or friends, and one for property responses to the question of why the respondent chose "this" place instead of some other.

The specification is such as to disaggregate use, overall, into additive proportional components. We find transmittances for the overall proportion responding with a desire to move back home, and likewise for the other two forms of utilization. The estimates are obtained by calculations upon three two by four tables (use or non-use of the indicated category and four conditions of prior residence and family or friends). The referent category for each equation is having neither form of LSC. The results in tabular and equation forms are presented in Table 2.

Because these are unstandardized rates of return, we may compare coefficients in the tabular display both within rows and across columns. We find that the effect of prior residence (only) on overall use of location specific capital is entirely by way of its effect on using LSC in the form of selecting a destination because of property in the area. We suspect that were we to include a measure of the existence of property in the area prior to moving we would find that all of the effect of prior residence is spurious by way of other elements. Prior residence then, is seemingly a composite surrogate for more specific items to which people respond in destination selection. This is not to deny the importance of prior residence as a factor influencing destination selection. From these results, however, we see that its effects on utilization only emerge in combination with other, presumably more proximate causal factors such as having family or friends.

Looking down the column of coefficients in the equation for proportions suggesting a desire to move back home we find significant coefficients under two conditions. First, though relatively small in magnitude, we find a positive transmittance for those with only family or friends. We surmise that these responses arise from the social as opposed to the residential meaning of home. Home, for these people, is where the family is regardless of whether they have ever lived in the area before. In addition, though, we find a very high rate of return in the form of "back home" response differentials among those with family and friends left behind in a prior residential area.

In contrast to these findings for back home utilization, responses suggesting family or friends as the crucial element in destination selection seem to arise more equally from the two important conditions. Family or friends, alone, has a moderate rate of return coefficient but so does the condition of both. The slightly larger coefficient for family or friends only suggests that having family or friends in a new location produces at least as great a return in destination selection as does having family or friends in an old location. These comments of course apply only to the effects of these two conditions linked specifically to destination selection on the basis of family and/or friends.

Property, in turn, seems to arise as a basis for destination selection only in response to having only family or friends when taking significance tests into account. Again, we might suspect this effect to be spurious by way of other linkages.

Discussion and Summary

The previous analysis has demonstrated, in heretofore unexplored detail, that migrants in at least one type of stream, to nonmetropolitan growth areas, have in substantial numbers and proportions utilized location specific capital in selecting their ultimate destinations. Moreover, this utilization process is not random and we find that different forms of location specific capital are of different "value" in producing directed destination selection. We may trace out, albeit in an as yet rather rudimentary fashion, some of the linkages between use in the form of different reason responses and the existence of varying types of location specific capital. Taken together in a total system we find that the subcomponents work differently in response to differing existence conditions.

Our findings, of course, are not without qualifications and sources of improvement and further work. First, our sample is not nationally representative. However, our findings revolve around slope lines and not absolute proportions utilizing location specific capital. Therefore, our results could be generalizable to a larger population of migrants if in spite of lower utilization levels in the general population, differentials between control categories remained about the same as reported here, or at least in the same directions. This is equivalent to suggesting that absolute levels, or results of processes, may not be generalizable, but that the relative differentials, the processes themselves, are not unusual. We have no way of knowing.

A further concern is with a potential for reification of the concept of location specific capital. Our terminology of "capital," "rates of return," and "cashing-in" is meant simply as a heuristic device signaling a dimension of migration research too long neglected and an approach which may prove useful.

The analysis performed here is only a beginning step. With appropriate operationalizations, and sufficient cases, it would be useful to consider a

greater variety of existence and use forms of location specific capital.
And, one wonders how these transmittances may differ for different types
of people. Though more work is needed, we feel we have begun a fruitful
endeavor.

Substantively our findings clarify two issues in relation to the
dynamics of migration behavior at the level of destination selection. First
our data indicate that prior residence has little effect on destination
selection without acting in concert with other forms of location specific
capital. At least for these kinds of migrants it can be said that they
do not say that they want to go back home if all that is there is the
intangible property of simply being a place the person is from at some
prior time. Specifically, it is not the place, but the place and the people
for these migrants.

The second issue which has been clarified is that of the value of
family or friends among onward migrants. Again, care must be taken to
note that generalization may be impossible beyond migrants to growing
nonmetropolitan areas of the midwest, but we can see in these data that
there is a positive and significant effect of family and friends in a
non-prior residential location upon destination selection. This directly
demonstrates that social ties are not only causal in return migration,
but are also an important factor for those moving onward to a new location.

References

Brown, Lawrence A., and Eric G. Moore
1970   "The intraurban migration process: a perspective." General Systems
        55:109-22.

DaVanzo, Julie, and Peter A. Morrison
1978   "Dynamics of return migration: descriptive findings from a longitu-
        dinal study." Rand Paper P-5913, Palo Alto, CA.

Davis, James A.
1975   "Communism, conformity, cohorts, and categories: American tolerance
        in 1954 and 1972-73." American Journal of Sociology 81:491.

Davis, James A.
1976   "Analyzing contingency tables with linear flow graphs: d systems."
        in Sociological Methodology, 1976, David R. Heise (ed.).

Ritchey, P. N.
1976   "Explanations of migration." pp. 363-404 in Alex Inkeles, J. Coleman,
        and N. Smelser (eds.), Annual Review of Sociology. Vol. 2. Palo Alto,
        CA.

Roseman, Curtis C.
1977   "Changing migration patterns within the United States." Resource
        Papers for College Geography No. 77-2. Association of American
        Geographers.

Shaw, Paul R.
1975   Migration theory and fact: a review and bibliography of current
        literature. Bibliography Series No. 5, Philadelphia: Regional Science
        Research Institute.

Sly, David F.
1974   Tourism's role in migration to Florida: basic tourist-migration rela-
        tionship. Governmental Research Bulletin, The Florida State Univer-
        sity, Institute for Social Research, Vol. 11.

Speare, Alden, Jr., Sidney Goldstein, and William H. Frey
1974   Residential mobility, migration, and metropolitan change. Cambridge:
        Ballinger.

Toney, Michael B.
1978   "The simultaneous examination of economic and social factors in destina
        tion selection: employing objective and subjective measures." Demo-
        graphy, Vol. 15(2).

Williams, James D., and Andrew J. Sofranko
1979   "Migration motivations for the inmigration component of population
        turnaround." Demography 16.

Williams, James D., and David Byron McMillen
1978   "The utility of disaggregating the migration decision making process:
        a substantive example." Series S, Rural Sociology 78-S7, Department
        of Agricultural Economics, University of Illinois-Urbana.

Table 1. Detailed Motivations

	Destination Selection Criteria		
	N	% of Total	% of catg.
All reasons	710	100.0	----
1. Employment: job change; reassignment	148	20.8	100.0
Transfer	42	5.9	28.4
Look for new or better job	14	2.0	9.5
Found new or better job	64	9.0	43.2
Unemployment	0	---	---
Other (incl. military)	28	9.9	18.9
2. Ties: location specific capital	338	47.6	100.0
Moved closer to business or job	40	5.6	11.8
Owned or received property	70	9.9	20.7
Moved closer to family or friends	97	13.7	28.7
Moved back home; lived in area before	81	11.4	24.0
Vacationed in or visited area before	43	6.1	12.7
Other ties	7	1.0	2.1
3. Environmental	176	24.8	100.0
General anti-urban or pro-rural	45	6.3	25.7
Congestion; wanted a smaller town	6	0.8	3.4
Pollution; environment	12	1.7	6.8
Climate	6	0.8	3.4
Crime	6	0.8	3.4
Schools	12	1.7	6.8
Recreational opportunities	24	3.4	13.6
Cost of living; taxes	15	2.1	8.5
Liked or disliked area in general	19	2.7	10.8
Other environmental factors	31	4.4	17.6
4. Other	47	6.6	100.0
Family; life cycle	11	1.5	23.4
Housing	19	2.7	40.5
Health	5	0.7	10.6
Other	12	1.7	25.5

FIGURE 1

RETURNS TO ANY FORM OF LOCATION SPECIFIC CAPITAL

```
                                              .1492
                                          Do not have LSC
                                                |
                                                |
                                                ↓
         Have         .2898                    Use
  .6900  LSC   ──────────────────────────→     LSC   .3492
```
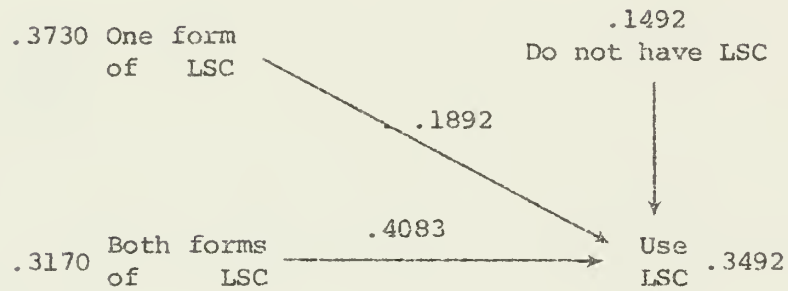
FIGURE 2

USE OF LOCATION SPECIFIC CAPITAL BY AMOUNT

```
  .3730 One form                              .1492
        of   LSC  ╲                      Do not have LSC
                   ╲                            |
                    ╲   .1892                   |
                     ╲                          ↓
         Both forms   ╲  .4083                 Use
  .3170  of   LSC  ──────────────────────→     LSC   .3492
```

FIGURE 3

RETURNS TO DIFFERING FORMS OF LOCATION SPECIFIC CAPITAL

```
  .0182 Prior                                 .1492
        only  ╲                              Nothing
               ╲   .0815                        |
                ╲                               |
                 ╲                              ↓
         Family or    .1946                    Use
  .3548  Friends only ──────────────────→      LSC   .3492
                          ╱
                         ╱
                        ╱
  .3170    Both  ──────╱   .4082
```
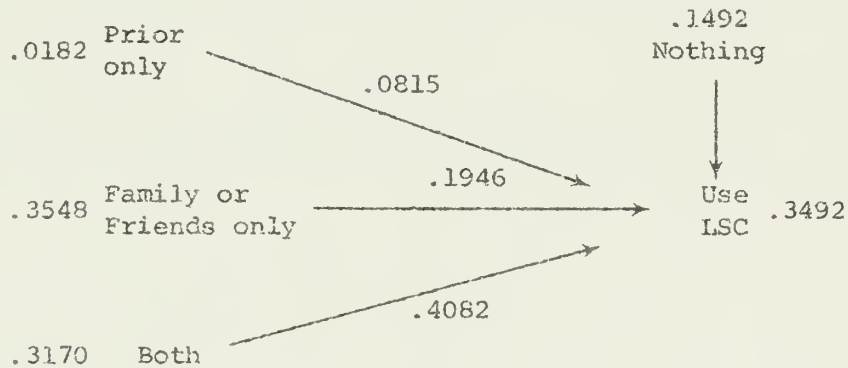
TABLE 2

D SYSTEM RESULTS FOR THE UTILIZATION OF LOCATION SPECIFIC CAPITAL

Tabular

Exogenous Conditions	Effects on Utilization of LSC			
	Indirect via			Total
	H	F/F	PP	USE
PR(only)	-.0181	.0181	.0814	.0814
FF(only)	.0214*	.1309*	.0422*	.1945
BOTH	.2784*	.1049*	.0249	.4082

Equations

$$P[USE] = P[H] + P[F/F] + P[PP]$$
$$P[H] = .0181 - .0181 \, P[PR] + .0214 \, P[FF] + .2784 \, P[BOTH]$$
$$P[F/F] = .0588 + .0181 \, P[PR] + .1309 \, P[FF] + .1049 \, P[BOTH]$$
$$P[PP] = .0724 + .0814 \, P[PR] + .0422 \, P[FF] + .0249 \, P[BOTH]$$

$$P[PR] = .0182$$
$$P[FF] = .3548$$
$$P[BOTH] = .3170$$

Legend

Exogenous
PR = prior residence only exists
FF = family or friends only exists
BOTH = both above exist

Endogenous
H = use in form of desire to go home, etc.
F/F = destination chosen because of family and/or friends
PP = destination selected on basis of prior property ownership
USE = use of LSC in any of above forms

* Indicates that the d coefficient is significant in a one-tail
  difference of proportions test (.10 level).